Application No.: 10/007,674
Amendment under 37 CFR 1.116

Reply to Office Action dated April 19, 2006

July 19, 2006

AMENDMENTS TO THE CLAIMS

Claim 1 (Previously presented): An active noise control system comprising:

a noise detector which detects a noise within a duct;

an error detector which is provided in a downstream side of the noise propagating within said duct for said noise detector to detect noise within said duct;

a control sound source which is installed in the vicinity of said error detector to radiate a control sound having approximately the same sound pressure as of and an opposite phase to the noise within said duct;

an arithmetic circuit which inputs an noise signal of said noise detector and an error signal of said error detector, sets a transfer function so that the error signal of said error detector becomes small, multiplies the noise signal of said noise detector with said transfer function, and outputs an multiplied result to said control sound source as a control signal; and

a rectifying part which is provided in an upstream side of a fluid flowing within said duct for said noise detector and said error detector, and increases a coherence of the fluid between

said noise detector and said error detector by rectifying the fluid within said duct,

wherein said rectifying part includes:

at least one first rectifying net;

a rectifying grid having an opening ratio greater than that of said first rectifying net, and said rectifying grid placed in said duct downstream of and spaced from said first rectifying net; and

at least one second rectifying net having an opening ratio smaller than that of said rectifying grid, and said second rectifying net placed in said duct downstream of and spaced from said rectifying grid.

Claims 2-27 (Canceled)

Claim 28 (Previously presented): The active noise control system according to claim 1, wherein the opening ratio of said first rectifying net and the opening ratio of said second rectifying net are equal.

Claim 29 (Previously presented): The active noise control system according to claim 1, wherein said first rectifying net and said second rectifying net have different opening ratios.

Claim 30 (Previously presented): The active noise control system according to claim 1, wherein said rectifying grid includes a plurality of capillaries.

Please add the following new claims 31-34 as follows:

Claim 31 (New): An active noise control system comprising: a noise detector which detects a noise within a duct;

an error detector which is provided in a downstream side of the noise propagating within said duct for said noise detector to detect noise within said duct;

a control sound source which is installed in the vicinity of said error detector to radiate a control sound having approximately the same sound pressure as of and an opposite phase to the noise within said duct;

an arithmetic circuit which inputs an noise signal of said noise detector and an error signal of said error detector, sets a

transfer function so that the error signal of said error detector becomes small, multiplies the noise signal of said noise detector with said transfer function, and outputs an multiplied result to said control sound source as a control signal; and

a rectifying part which is provided in an upstream side of a fluid flowing within said duct for said noise detector and said error detector, and increases a coherence of the fluid between said noise detector and said error detector by rectifying the fluid within said duct,

wherein said rectifying part includes:

at least one first rectifying net;

a rectifying grid having an opening ratio greater than that of said first rectifying net, and said rectifying grid placed in said duct downstream of and spaced from said first rectifying net; and

at least one second rectifying net having an opening ratio smaller than that of said rectifying grid, and said second rectifying net placed in said duct downstream of and spaced from said rectifying grid for readjusting a velocity of said fluid passing through a space between said rectifying grid and said second rectifying net.

Claim 32 (New): The active noise control system according to claim 31, wherein the opening ratio of said first rectifying net and the opening ratio of said second rectifying net are equal.

Claim 33 (New): The active noise control system according to claim 31, wherein said first rectifying net and said second rectifying net have different opening ratios.

Claim 34 (New): The active noise control system according to claim 31, wherein said rectifying grid includes a plurality of capillaries.